



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/845,051   | 04/27/2001  | Sev K. H. Keil       | B01.002             | 1476             |
| 28062  | 7590        | 10/04/2004           | EXAMINER            |                  |
| BUCKLEY, MASCHOFF, TALWALKAR LLC<br>5 ELM STREET<br>NEW CANAAN, CT 06840 |             |                      | LASTRA, DANIEL      |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 3622                |                  |

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/845,051

Applicant(s)

KEIL ET AL.

Examiner

DANIEL LASTRA

Art Unit

3622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 April 2004.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-76 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-33 and 38-71 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☒ Claim(s) 34-38 and 72-76 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 06/22/01.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-76 have been examined. Application 09/845,051 (SYSTEM TO PROVIDE CONSUMER PREFERENCE INFORMATION) has a filing date 04/27/2001.

#### ***Claim Objections***

2. Claim 58 is objected to because of the following informalities: "A method" should recite "A medium". Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-38 are not within the technological arts.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts".

Art Unit: 3622

See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income,

Art Unit: 3622

expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, independent claims 1, 22, 31 and 34 recite a “useful, concrete and tangible result” (determining preference information), however the claims recite no structural limitations (i.e., computer implementation), and so they fail the first prong of the test (technological arts). Dependent claims 2-21, 23-30, 32, 33 and 35-38 do not remedy this situation as no structural limitations are recited.

#### ***Election/Restrictions***

4. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-33, 38-71, drawn to determining preferences (analyzing responses), classified in class 705, subclass 14.
  - II. Claims 34-38 and 72-76, drawn to selecting questions, classified in class 705, subclass 10.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with the attorney of record on claims 1-76 a provisional election was made to prosecute the invention of Group I, claims 1-33, 38-71. Affirmation of this election must be made by applicant in replying to this Office action.

Art Unit: 3622

Claims 34-38 and 72-76 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-33, 38-71 are rejected under 35 U.S.C. 102(b) as being anticipated by Herz (U.S. 6,029,195).

As per claim 1, Herz teaches:

A method for determining preference information, comprising:

determining preference information associated with a consumer (see column 6, lines 16-59); and

mixing the preference information with preference information associated with a plurality of consumers (see column 7, line 19 – column 8, line 47),

wherein a degree to which the preference information associated with the consumer is mixed with the preference information associated with the plurality of consumers is different than a second degree to which second preference information associated with a second consumer is mixed with preference information of a second plurality of consumers (see column 21, line 5 – column 22, line 29; column 29, lines 1-35).

As per claim 2, Herz teaches:

A method according to Claim 1, wherein the preference information associated with the consumer and the preference information associated with the plurality of other consumers comprise normalized part worth values (see column 65, line 50 – column 66, line 61).

As per claim 3, Herz teaches:

A method according to Claim 2, wherein the preference information associated with the consumer and the preference information associated with the plurality of other consumers comprise currency-normalized part worth values (see column 65, line 50 – column 66, line 61).

As per claim 4, Herz teaches:

A method according to Claim 1, further comprising:

selecting the plurality of consumers from a group of past consumers based on attribute levels identified as unacceptable by each consumer of the group of past consumers (see column 21, lines 35-67).

As per claim 5, Herz teaches:

A method according to Claim 4, wherein the selected plurality of consumers are members of the group of past consumers who identified similar attribute levels as unacceptable (see column 21, lines 35-67).

As per claim 6, Herz teaches:

A method according to Claim 1, further comprising:



selecting the plurality of consumers from a group of past consumers based on part worth values associated with each consumer of the group of past consumers (see column 21, lines 5-35).

As per claim 7, Herz teaches:

A method according to Claim 6, wherein the selected plurality of consumers are members of the group of past consumers who are associated with similar preference information (see column 6, lines 17-59).

As per claim 8, Herz teaches:

A method according to Claim 1, wherein mixing the preference information comprises:

normalizing the preference information (see column 15, lines 35-67);

determining consumer subgroups (see column 89, lines 25-50);

assigning the consumer to one of the consumer subgroups (see column 89, lines 25-67); and

mixing preference information associated with the one of the consumer subgroups with the preference information associated with the consumer (see column 87, lines 5-40).

As per claim 9, Herz teaches:

A method according to Claim 8, wherein determining consumer subgroups comprises:

assigning past consumers to subgroups based on attribute levels that the past consumers indicated as unacceptable (see column 21, lines 35-67).

As per claim 10, Herz teaches:

A method according to Claim 8, wherein determining consumer subgroups comprises:

assigning past consumers to subgroups based on part worth values associated with the past consumers (see column 5, line 30 – column 6, line 30).

As per claim 11, Herz teaches:

A method according to Claim 1, wherein mixing the preference information comprises:

providing trade-off questions to the consumer (see column 12, lines 25-38; column 18, lines 10-67);

receiving actual answers to the trade-off questions (see column 18, lines 10-30);

predicting consumer answers to the trade-off questions based on the preference information associated with the consumer (see column 19, lines 9-27); and

predicting subgroup answers to the trade-off questions based on the preference information associated with the plurality of consumers (see column 19, lines 8-67),

wherein the preference information is mixed with the preference information associated with the plurality of consumers based on the actual answers, the predicted consumer answers and the predicted subgroup answers (see column 23, line 60 – column 24, line 40).

As per claim 12, Herz teaches:

A method according to Claim 11, further comprising:

Art Unit: 3622

determining a mixing parameter based on the actual answers, the predicted consumer answers and the predicted subgroup answers, wherein the preference information is mixed with the preference information associated with the plurality of consumers based on the mixing parameter (see column 23, line 60 – column 24, line 40).

As per claim 13, Herz teaches:

A method according to Claim 1, further comprising:

determining an offer to sell a product based on the mixed preference information (see column 23, line 60 – column 24, line 40).

As per claim 14, Herz teaches:

A method according to Claim 13, further comprising:

providing the offer to the consumer (see column 9, line 55-67).

As per claim 15, Herz teaches:

A method according to Claim 1, wherein the first plurality of consumers is identical to the second plurality of consumers (see column 23, line 60 – column 24, line 40).

As per claim 16, Herz teaches:

A method according to Claim 1, wherein the first plurality of consumers does not include any consumers belonging to the second plurality of consumers (see column 7, line 50 – column 8, line 47).

As per claim 17, Herz teaches:

A method according to Claim 1, wherein one or more of the first plurality of consumers are members of the second plurality of consumers (see column 7, line 50 – column 8, line 47).

As per claim 18, Herz teaches:

A method according to Claim 1, wherein the plurality of consumers comprises all past consumers for whom preference information is stored (see column 17, lines 1-10).

As per claim 19, Herz teaches:

A method according to Claim 1, wherein the plurality of consumers comprises a predetermined number of past consumers for whom preference information is stored (see column 17, lines 1-56).

As per claim 20, Herz teaches:

A method according to Claim 19, wherein the predetermined number of past consumers are determined based on a time at which preference information associated with each of the predetermined number of consumers was collected (see column 18, lines 10-67).

As per claim 21, Herz teaches:

A method according to Claim 1, wherein the plurality of consumers comprises all past consumers for whom preference information was collected during a particular time period (see column 18, lines 9-67).

As per claim 22, Herz teaches:

A method for determining preference information, comprising:

Art Unit: 3622

determining preference information associated with a consumer (see column 9, line 42 – column 10, line 27) ;

validating the preference information (see column 30, line 46 – column 31, line 10); and

mixing the preference information with preference information associated with a plurality of consumers based on the validating step (see column 17, lines 1-55).

Claim 22 contains the same limitations as claim 11 therefore the same rejection is applied.

As per claim 23, Herz teaches:

A method according to Claim 22, wherein the validating step comprises:

providing trade-off questions to the consumer;

receiving actual answers to the trade-off questions; and

predicting consumer answers to the trade-off questions based on the preference information associated with the consumer. Claim 23 contains the same limitations as claim 11 therefore the same rejection is applied.

As per claim 24, Herz teaches:

A method according to Claim 23, further comprising:

predicting subgroup answers to the trade-off questions based on the preference information associated with the plurality of consumers,

wherein the preference information is mixed with the preference information associated with the plurality of consumers based on the actual answers, the predicted

Art Unit: 3622

consumer answers and the predicted subgroup answers. Claim 24 contains the same limitations as claim 11 therefore the same rejection is applied.

As per claim 25, Herz teaches:

A method according to Claim 24, further comprising:

determining a mixing parameter based on the actual answers, the predicted consumer answers and the predicted subgroup answers, wherein the preference information is mixed with the preference information associated with the plurality of consumers based on the mixing parameter. Claim 25 contains the same limitations as claim 12 therefore the same rejection is applied.

As per claim 26, Herz teaches:

A method according to Claim 22, further comprising:

determining a mixing parameter based on the validating step, wherein the preference information is mixed with the preference information associated with the plurality of consumers based on the mixing parameter. Claim 26 contains the same limitations as claim 12 therefore the same rejection is applied.

As per claim 27, Herz teaches:

A method according to Claim 22, further comprising:

selecting the plurality of consumers from a group of consumers based on attribute levels indicated as unacceptable by each consumer of the group of past consumers. Claim 27 contains the same limitations as claim 4 therefore the same rejection is applied.

As per claim 28, Herz teaches:

A method according to Claim 27, wherein the selected plurality of consumers are members of the group of past consumers who identified similar attribute levels as unacceptable. Claim 28 contains the same limitations as claim 5 therefore the same rejection is applied.

As per claim 29, Herz teaches:

A method according to Claim 22, further comprising:

selecting the plurality of consumers from a group of past consumers based on part worth values associated with each consumer of the group of past consumers. Claim 29 contains the same limitations as claim 6 therefore the same rejection is applied.

As per claim 30, Herz teaches:

A method according to Claim 29, wherein the selected plurality of consumers are members of the group of past consumers who are associated with similar part worth values. Claim 30 contains the same limitations as claim 7 therefore the same rejection is applied.

As per claim 31, Herz teaches:

A method to produce consumer preference information, comprising:

determining consumer preference information associated with a consumer; and currency-normalizing the consumer preference information. Claim 31 contains the same limitations as claim 2 therefore the same rejection is applied.

As per claim 32, Herz teaches:

A method according to Claim 31, further comprising: providing an offer based on the currency-normalized information (see column 29, lines 1-35).

As per claim 33, Herz teaches:

A method according to Claim 32, further comprising: providing the offer to the consumer. Claim 33 contains the same limitations as claim 14 therefore the same rejection is applied.

As per claim 39, Herz teaches:

A medium storing processor-executable process steps, the process steps comprising:

a step to determine preference information associated with a consumer;

and a step to mix the preference information with preference information associated with a plurality of consumers, wherein a degree to which the preference information associated with the consumer is mixed with the preference information associated with the plurality of consumers is different than a second degree to which second preference information associated with a second consumer is mixed with preference information of a second plurality of consumers. Claim 39 contains the same limitations as claim 1 therefore the same rejection is applied.

As per claim 40, Herz teaches:

A medium according to Claim 39, wherein the preference information associated with the consumer and the preference information associated with the plurality of other consumers comprise normalized part worth values. Claim 40 contains the same limitations as claim 2 therefore the same rejection is applied.



As per claim 41, Herz teaches:

A medium according to Claim 40, wherein the preference information associated with the consumer and the preference information associated with the plurality of other consumers comprise currency-normalized part worth values. Claim 41 contains the same limitations as claim 3 therefore the same rejection is applied.

As per claim 42, Herz teaches:

A medium according to Claim 39, the process steps further comprising:

a step to select the plurality of consumers from a group of past consumers based on attribute levels identified as unacceptable by each consumer of the group of past consumers. Claim 42 contains the same limitations as claim 4 therefore the same rejection is applied.

As per claim 43, Herz teaches:

A medium according to Claim 42, wherein the selected plurality of consumers are members of the group of past consumers who identified similar attribute levels as unacceptable. Claim 43 contains the same limitations as claim 5 therefore the same rejection is applied.

As per claim 44, Herz teaches:

A medium according to Claim 39, the process steps further comprising:

a step to select the plurality of consumers from a group of past consumers based on part worth values associated with each consumer of the group of past consumers. Claim 44 contains the same limitations as claim 6 therefore the same rejection is applied.

As per claim 45, Herz teaches:

A medium according to Claim 44, wherein the selected plurality of consumers are members of the group of past consumers who are associated with similar preference information. Claim 45 contains the same limitations as claim 7 therefore the same rejection is applied.

As per claim 46, Herz teaches:

A medium according to Claim 39, wherein the step to mix the preference information comprises:

- a step to normalize the preference information;
- a step to determine consumer subgroups;
- a step to assign the consumer to one of the consumer subgroups; and
- a step to mix preference information associated with the one of the consumer subgroups with the preference information associated with the consumer. Claim 46 contains the same limitations as claim 8 therefore the same rejection is applied.

As per claim 47, Herz teaches:

A medium according to Claim 46, wherein the step to determine consumer subgroups comprises:

- a step to assign past consumers to subgroups based on attribute levels that the past consumers indicated as unacceptable. Claim 47 contains the same limitations as claim 9 therefore the same rejection is applied.

As per claim 48, Herz teaches:

A medium according to Claim 46, wherein the step to determine consumer subgroups comprises:

a step to assign past consumers to subgroups based on part worth values associated with the past consumers. Claim 48 contains the same limitations as claim 10 therefore the same rejection is applied.

As per claim 49, Herz teaches:

A medium according to Claim 39, wherein the step to mix the preference information comprises:

a step to provide trade-off questions to the consumer;

a step to receive actual answers to the trade-off questions;

a step to predict consumer answers to the trade-off questions based on the preference information associated with the consumer; and

a step to predict subgroup answers to the trade-off questions based on the preference information associated with the plurality of consumers, wherein the preference information is mixed with the preference information associated with the plurality of consumers based on the actual answers, the predicted consumer answers and the predicted subgroup answers. Claim 49 contains the same limitations as claim 11 therefore the same rejection is applied.

As per claim 50, Herz teaches:

A medium according to Claim 49, the process steps further 2 comprising:

a step to determine a mixing parameter based on the actual answers, the predicted consumer answers and the predicted subgroup answers, wherein the

Art Unit: 3622

preference information is mixed with the preference information associated with the plurality of consumers based on the mixing parameter. Claim 50 contains the same limitations as claim 12 therefore the same rejection is applied.

As per claim 51, Herz teaches:

A medium according to Claim 39, the process steps further 2 comprising:

a step to determine an offer to sell a product based on the mixed preference information. Claim 51 contains the same limitations as claim 13 therefore the same rejection is applied.

As per claim 52, Herz teaches:

A medium according to Claim 51, the process steps further 2 comprising:

a step to provide the offer to the consumer. Claim 52 contains the same limitations as claim 14 therefore the same rejection is applied.

As per claim 53, Herz teaches:

A medium according to Claim 39, wherein the first plurality of consumers is identical to the second plurality of consumers. Claim 53 contains the same limitations as claim 15 therefore the same rejection is applied.

As per claim 54, Herz teaches:

A medium according to Claim 39, wherein the first plurality of consumers does not include any consumers belonging to the second plurality of consumers. Claim 54 contains the same limitations as claim 16 therefore the same rejection is applied.

As per claim 55, Herz teaches:

A medium according to Claim 39, wherein one or more of the first plurality of consumers belong to the second plurality of consumers. Claim 55 contains the same limitations as claim 17 therefore the same rejection is applied.

As per claim 56, Herz teaches:

A medium according to Claim 39, wherein the plurality of consumers comprises all past consumers for whom preference information is stored. Claim 56 contains the same limitations as claim 18 therefore the same rejection is applied.

As per claim 57, Herz teaches:

A medium according to Claim 39, wherein the plurality of consumers comprises a predetermined number of past consumers for whom preference information is stored. Claim 57 contains the same limitations as claim 19 therefore the same rejection is applied.

As per claim 58, Herz teaches:

A medium according to Claim 57, wherein the predetermined number of past consumers are determined based on a time at which preference information associated with each of the predetermined number of consumers was collected. Claim 58 contains the same limitations as claim 20 therefore the same rejection is applied.

As per claim 59, Herz teaches:

A medium according to Claim 39, wherein the plurality of consumers comprises all past consumers for whom preference information was collected during a particular time period. Claim 59 contains the same limitations as claim 21 therefore the same rejection is applied.

Art Unit: 3622

As per claim 60, Herz teaches:

A medium storing processor-executable process steps, the process steps comprising:

a step to determine preference information associated with a consumer;

a step to validate the preference information; and

a step to mix the preference information with preference information associated with a plurality of consumers based on the validating step. Claim 60 contains the same limitations as claim 22 therefore the same rejection is applied.

As per claim 61, Herz teaches:

A medium according to Claim 60, wherein the validating step comprises:

a step to provide trade-off questions to the consumer;

a step to receive actual answers to the trade-off questions; and

a step to predict consumer answers to the trade-off questions based on the preference information associated with the consumer. Claim 61 contains the same limitations as claim 23 therefore the same rejection is applied.

As per claim 62, Herz teaches:

A medium according to Claim 61, the process steps further comprising:

a step to predict subgroup answers to the trade-off questions based on the preference information associated with the plurality of consumers, wherein the preference information is mixed with the preference information associated with the plurality of consumers based on the actual answers, the predicted consumer answers

Art Unit: 3622

and the predicted subgroup answers. Claim 62 contains the same limitations as claim 24 therefore the same rejection is applied.

As per claim 63, Herz teaches:

A medium according to Claim 62, the process steps further comprising:

a step to determine a mixing parameter based on the actual answers, the predicted consumer answers and the predicted subgroup answers, wherein the preference information is mixed with the preference information associated with the plurality of consumers based on the mixing parameter. Claim 63 contains the same limitations as claim 25 therefore the same rejection is applied.

As per claim 64, Herz teaches:

A medium according to Claim 60, the process steps further comprising:

a step to determine a mixing parameter based on the validating step, wherein the preference information is mixed with the preference information associated with the plurality of consumers based on the mixing parameter. Claim 64 contains the same limitations as claim 26 therefore the same rejection is applied.

As per claim 65, Herz teaches:

A medium according to Claim 60, the process steps further comprising:

a step to select the plurality of consumers from a group of consumers based on attribute levels indicated as unacceptable by each consumer of the group of past consumers. Claim 65 contains the same limitations as claim 27 therefore the same rejection is applied.

As per claim 66, Herz teaches:

A medium according to Claim 65, wherein the selected plurality of consumers are members of the group of past consumers who identified similar attribute levels as unacceptable. Claim 66 contains the same limitations as claim 28 therefore the same rejection is applied.

As per claim 67, Herz teaches:

A medium according to Claim 60, the process steps further comprising:

a step to select the plurality of consumers from a group of past consumers based on part worth values associated with each consumer of the group of past consumers. Claim 67 contains the same limitations as claim 29 therefore the same rejection is applied.

As per claim 68, Herz teaches:

A medium according to Claim 67, wherein the selected plurality of consumers are members of the group of past consumers who are associated with similar part worth values. Claim 68 contains the same limitations as claim 30 therefore the same rejection is applied.

As per claim 69, Herz teaches:

A medium storing processor-executable process steps to produce consumer preference information, the process steps comprising:

a step to determine consumer preference information associated with a consumer; and

a step to currency-normalize the consumer preference information. Claim 69 contains the same limitations as claim 31 therefore the same rejection is applied.



As per claim 70, Herz teaches:

A medium according to Claim 69, the process steps further comprising:

a step to provide an offer based on the currency-normalized information. Claim 70 contains the same limitations as claim 32 therefore the same rejection is applied.

As per claim 71, Herz teaches:

A medium according to Claim 70, the process steps further comprising:

a step to provide the offer to the consumer. Claim 71 contains the same limitations as claim 33 therefore the same rejection is applied.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL LASTRA whose telephone number is 703-306-5933. The examiner can normally be reached on 9:30-6:00.

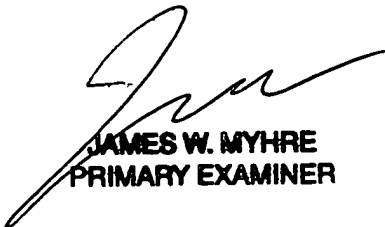
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ERIC W STAMBER can be reached on 703-305-8469. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DL

Daniel Lastra

September 3, 2004

  
JAMES W. MYHRE  
PRIMARY EXAMINER